REMARKS

In response to the objection to the disclosure, the Abstract has been amended to replace "comprising" with --including--.

Claims 1, 6-18 and 21-28 are rejected; and claims 2-5, 19 and 20 are objected to as being allowable if rewritten in independent form.

Review and reconsideration on the merits are requested.

Claims 1, 6-18 and 21-28 were rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 7,070,631 to Monden et al. Monden et al. was cited as disclosing the method steps of the rejected claims, including a step of making cut lines in a valve acting metal foil in a shape of a capacitor element with at least part of a portion predetermined to be an anode-leading-out part left uncut; a step of etching the cut edge surface generated in the previous step and the surface part of the valve-acting metal foil; and a step of electrochemically forming the metal foil (citing column 3, lines 47-65; column 8, lines 12-14 and lines 50-67; and column 9, lines 1-16).

Applicants traverse, and respectfully request the Examiner to reconsider for the following reasons.

Monden et al. does not disclose making cut lines in the shape of a capacitor element with at least a part of a portion predetermined to be the anode part uncut, as required by independent claims 1 and 28. This is shown in detail below.

Monden et al. at columns 7-8 discloses cutting an aluminum foil 1 into a predetermined rectangular shape; masking the bounder part between part 2 which is to become the anode and region 3 used for forming an electrically conducting layer on aluminum foil 1 using masking 4;

electrolytically etching an area lower than the portion working out to be an anode; electrolytically forming the etched cut end part 5; and forming a polymer solid electrolyte 7 on the electrochemically formed area 6.

Present claims 1 and 28 differ from the above-noted disclosure of Monden et al. including Fig. 2 in that the present claims require making cut lines in the shape of a capacitor element with at least part of (i.e., the portion to be the anode-leading-out part) the foil left uncut. This is shown in Fig. 1(A) and Fig. 2 of the present specification in which the cut line (cut groove) 5 is made, leaving uncut portion 2 predetermined to be the anode-leading-outpart. Particularly, in this embodiment, the cut line has a square shape with one side open or rather uncut (page 13, lines 23-28). On the other hand, in Monden et al., the aluminum foil is slit into a predetermined shape, namely, a rectangular shape as shown in Fig. 2, and one side of each cut aluminum foil is then fixed to a metal made support 10 to lay the aluminum foils in a row as shown in Fig. 1 (column 6, lines 28-41 and column 7, lines 13-18 of Monden et al.). All sides are cut.

Monden et al. at column 7, lines 18-20 describes that alternatively, the aluminum foil is cut to a comb-like shape from which capacitor elements can be taken out and then fixed to the support. The fact that the capacitor elements are "taken out" teaches that all sides of the metal foil are cut (i.e., no part left uncut as required by the present claims).

Because Monden et al. fails to meet each of the terms of claims 1 and 28, it is respectfully submitted that claims 1, 6-18 and 21-28 define novel subject matter and withdrawal of the foregoing rejection under 35 U.S.C. § 102(e) is respectfully requested.

The present invention also differs from Monden et al. with respect to the shape of the aluminum foil for use in producing the capacitor elements. In the present invention, the method for producing a metal foil for capacitors comprises the steps of:

making cut lines in a valve-acting metal in a shape of a capacitor element, and

etching the cut edge surface generated in the previous step.

Meanwhile, Monden et al. discloses the steps of cutting an aluminum foil into a shape of a capacitor element (a predetermined rectangular shape), followed by etching a cut end part formed by said cutting and other steps.

In Monden et al. (corresponding to WO 02/063645, and discussed at page 4, lines 19-29 of the present specification), the foil cut out into a capacitor element shape is etched from the cut edge surface and angles, and at this time, burrs on the cut edge part are dissolved. In this method, etching is likely to be localized on the cut end part of the foil, which makes it difficult to achieve an even etching layer. See paragraphs [0012] and [0065] of US 2006/0046417 A1 which is the publication of the present application. For reference, paragraph [0012] corresponds to the specification at page 4, lines 19-29 and paragraph [0065] corresponds to the specification at page 14, lines 16-32.

On the other hand, according to the method of the present invention, an etching layer can be formed uniformly on all of the surfaces, edges and angles (see paragraphs [0066] and [0067] of the publication of the present application).

Effects of the present invention:

1) According to the present invention, a very uniform etching layer can be formed on the valve-metal foil.

2) Since an aluminum foil in which cut lines are made in a shape of a capacitor element is subjected to etching, the present method dispenses with the need of a bar to hang the aluminum foil pieces cut into a shape of a capacitor (corresponding to the metal made support (10) in Fig. 1 of Monden et al.). Thus, the present method is applicable to a valve-metal sheet or coil.

In the present method, because the aluminum foil can be cut out in the shape of a capacitor after etching (and chemical formation) is completed, etching and chemical formation can be performed using a commercial 500 mm-wide coil. That is, the present method is applicable to mass-production.

Withdrawal of all rejections and allowance of claims 1-28 is earnestly solicited.

In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Abraham J. Rosner
Registration No. 33,276

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: April 19, 2007